



PATENT APPLICATION

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re the Application of

Shinya HIROTA et al.

Group Art Unit: 3748

Application No.: 10/088,476

Examiner: T. Nguyen

Filed: March 20, 2002

Docket No.: 112340

For: EXHAUST GAS PURIFICATION DEVICE

INFORMATION DISCLOSURE STATEMENT

Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

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TECHNOLOGY CENTER R3700


Sir:

Pursuant to 37 CFR §1.56, the attention of the Patent and Trademark Office is hereby directed to the references listed on the attached PTO-1449. Unless otherwise indicated herein, one copy of each reference is attached. It is respectfully requested that the information be expressly considered during the prosecution of this application, and that the references be made of record therein and appear among the "References Cited" on any patent to issue therefrom.

- ☒ 1. This Information Disclosure Statement is being filed more than three months after the U.S. filing date and after the mailing date of a Final Rejection, Notice of Allowance, or other action that closes prosecution (e.g., Quayle Action), but before payment of the Issue Fee. Attached is our Check No. 152114 in the amount of \$180.00 in payment of the fee under 37 CFR §1.17(p). Please credit or debit Deposit Account No. 15-0461 as needed to ensure consideration of the disclosed information. Two duplicate copies of this paper are attached.
- ☒ a. I hereby certify that each item of information contained in this Information Disclosure Statement was first cited in any communication from a foreign patent office in a counterpart foreign application not more than three months prior to the filing of this Information Disclosure Statement.  
37 CFR §1.97(e)(1).
- ☒ 2. Each item of information contained in this Information Disclosure Statement was cited in a communication from a foreign patent office in a counterpart application, and this communication was not received by any individual designated in §1.56(c) more than thirty days prior to the filing of this Information Disclosure Statement.
- ☒ 3. English-language Abstracts of the non-English language references are attached hereto. See References 1, 2, 3, 4, 5 and 6.

- ☒ 4. A computer-generated English translation of the following Japanese Patent Publication has been obtained from the website of the Japanese Patent Office (<http://www.jpo.go.jp>), and is attached, but has not been reviewed for accuracy. See Reference 2.
- ☒ 5. JP 6-272541 and JP 6-159037 are not included as they were submitted with the Information Disclosure Statement filed April 3, 2002.

Respectfully submitted,



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Date: March 22, 2004

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| <p><b>DEPOSIT ACCOUNT USE<br/>AUTHORIZATION</b><br/>Please grant any extension<br/>necessary for entry;<br/>Charge any fee due to our<br/>Deposit Account No. 15-0461</p> |
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Information List

|               |             |
|---------------|-------------|
| US Serial No. | 10/088476   |
| Our ref:      | TYT-J759-US |

The following is a List of References cited in Office  
Action issued for corresponding Japanese Application.

| Document Number                                                                    | Publication Date | Brief Explanation or<br>Page(s) & Line(s) of<br>Related Part(s)                                                                                                                                                                                                                            |
|------------------------------------------------------------------------------------|------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Japanese<br>Unexamined<br>Patent<br>Publication<br>(Kokai)<br>No. 58-222907        | Dec. 24, '83     | A method is disclosed<br>for making the amount of<br>the exhaust gas flowing<br>into a particulate<br>filter small, when the<br>temperature of the<br>particulate filter<br>becomes larger than a<br>predetermined<br>temperature.                                                         |
| Japanese<br>Unexamined<br>Utility Model<br>Publication<br>(Kokai)<br>No. 01-174510 | Dec. 12, '89     | A method is disclosed<br>for making the amount of<br>the exhaust gas flowing<br>into a particulate<br>filter small, when the<br>temperature of the<br>particulate filter<br>becomes larger than a<br>predetermined<br>temperature.                                                         |
| Japanese<br>Unexamined<br>Patent<br>Publication<br>(Kokai)<br>No. 59-20510         | Feb. 2, '84      | From line 16 in the<br>right column on page 1<br>to line 9 in the upper-<br>left column on page 2<br>and from line 14 to<br>line 16 in the upper-<br>right column on page 2,<br>it is disclosed that a<br>cooling effect is<br>obtained by increasing<br>the amount of the<br>exhaust gas. |
| Japanese<br>Unexamined<br>Patent<br>Publication<br>(Kokai)<br>No. 06-272541        | Sep. 27, '94     | In paragraphs 0013 and<br>0015, a particulate<br>filter is disclosed,<br>which comprises an agent<br>for absorbing NOx<br>therein and emitting NOx<br>therefrom, and a method                                                                                                              |

A. AOKI, ISHIDA & ASSOCIATES

Information List

|               |             |
|---------------|-------------|
| US Serial No. | 10/088476   |
| Our ref:      | TYT-J759-US |

| Document Number                                                                   | Publication Date | Brief Explanation or Page(s) & Line(s) of Related Part(s)                                                                                                                                                                                                                                                                                                                                                                                                 |
|-----------------------------------------------------------------------------------|------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Japanese<br>Unexamined<br>Utility Model<br>Publication<br>(Kokai)<br>No. 60-45815 | Mar. 30, '85     | is disclosed for emitting sulfurate component attached to the particulate filter by making air-fuel-ratio rich.<br><br>On page 1 from line 1 to line 6 and on page 11 from line 5 to line 10, a method is disclosed, for making the amount of the exhaust gas flowing into a particulate filter smaller than a predetermined amount, when the temperature of the particulate filter is large and the concentration of oxygen in the exhaust gas is large. |
| Japanese<br>Unexamined<br>Patent<br>Publication<br>(Kokai)<br>No. 60-206925       | Oct. 18, '85     | From line 17 in the left column on page 1 to line 4 in the right column on page 1, and from line 17 in the upper-left column on page 2 to line 4 in the upper-right column on page 2, a method is disclosed, for making the amount of the exhaust gas flowing into a particulate filter smaller than a predetermined amount, when the temperature of the particulate filter is large and the concentration of oxygen in the exhaust gas is large.         |

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| US Serial No. | 10/088476   |
| Our ref:      | TYT-J759-US |

| Document Number                                                            | Publication Date | Brief Explanation or Page(s) & Line(s) of Related Part(s)                                                                                          |
|----------------------------------------------------------------------------|------------------|----------------------------------------------------------------------------------------------------------------------------------------------------|
| Japanese<br>Unexamined<br>Patent<br>Publication<br>(Kokai)<br>No. 5-1613   | Jan. 8, '93      | A technique to change the condition of driving of an engine to prevent overheating.                                                                |
| Japanese<br>Unexamined<br>Patent<br>Publication<br>(Kokai)<br>No. 6-159037 | Jun. 7, '94      | In paragraph 0012, a particulate filter is disclosed, which carries active-oxygen-emitting-agent comprising metal having high ionization tendency. |

A. AOKI, ISHIDA & ASSOCIATES

Sheet 1 of 1

|                                                                           |                                                   |                                      |                               |
|---------------------------------------------------------------------------|---------------------------------------------------|--------------------------------------|-------------------------------|
| Form PTO-1449<br>(REV. 8-83)                                              | US Dept. of Commerce<br>PATENT & TRADEMARK OFFICE | ATTY DOCKET NO.<br>112340            | APPLICATION NO.<br>10/088,476 |
| INFORMATION DISCLOSURE STATEMENT<br><br>(Use several sheets if necessary) |                                                   | APPLICANT(S)<br>Shinya HIROTA et al. |                               |
|                                                                           |                                                   | FILING DATE<br>March 20, 2002        | GROUP<br>3748                 |

## U.S. PATENT DOCUMENTS

| EXAMINER<br>INITIAL |  | DOCUMENT NUMBER | DATE | NAME | CLASS | SUB<br>CLASS |
|---------------------|--|-----------------|------|------|-------|--------------|
|                     |  |                 |      |      |       |              |
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## FOREIGN PATENT DOCUMENTS

|  |   | DOCUMENT NUMBER                         | DATE     | COUNTRY | CLASS | SUB<br>CLASS |
|--|---|-----------------------------------------|----------|---------|-------|--------------|
|  | 1 | JP-U-1-174510 (Abstract)                | 07-11-89 | Japan   |       |              |
|  | 2 | JP-A-5-1613 (Abstract &<br>Translation) | 01-08-93 | Japan   |       |              |
|  | 3 | JP-A-60-206925 (Abstract)               | 10-18-85 | Japan   |       |              |
|  | 4 | JP-U-60-45815 (Abstract)                | 03-12-85 | Japan   |       |              |
|  | 5 | JP-A-59-20510 (Abstract)                | 02-02-84 | Japan   |       |              |
|  | 6 | JP-A-58-222907 (Abstract)               | 12-24-83 | Japan   |       |              |
|  |   |                                         |          |         |       |              |

## OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, etc.)

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| EXAMINER                                                                                                                                                                                                                                    | DATE CONSIDERED |
| Examiner: Initial if citation considered, whether or not citation is in conformance with M.P.E.P. 609; draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant. |                 |

Date: March 22, 2004